(No Model.)

M. E. TRUE.

SAW HANDLE.

No. 422,468. Patented Mar. 4, 1890.

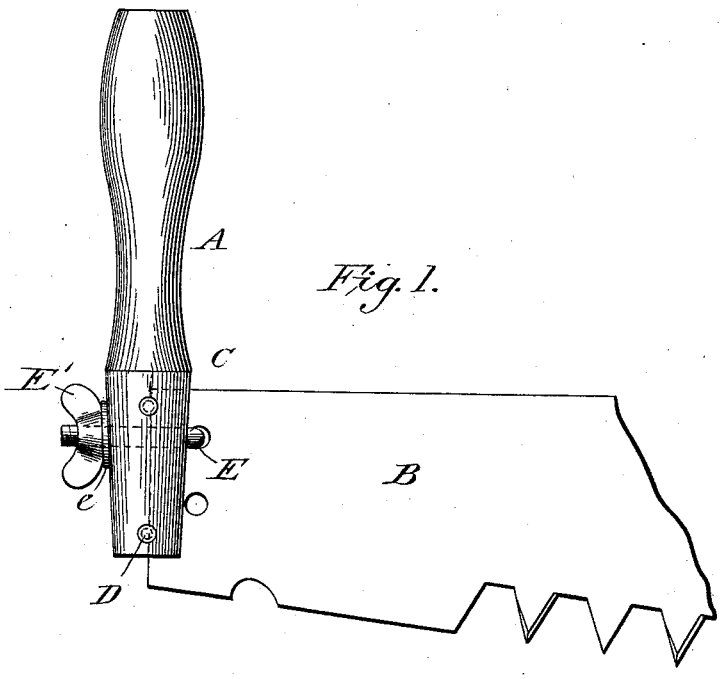

Fig. 1.

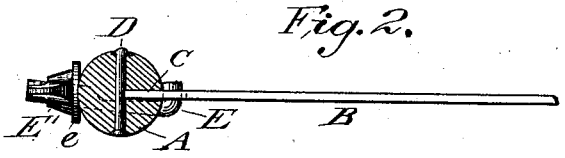

Fig. 2.

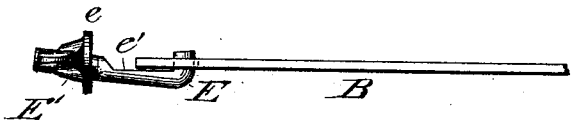

Fig. 3.

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UNITED STATES PATENT OFFICE.

MOSES E. TRUE, OF BATAVIA, NEW YORK.

SAW-HANDLE.

SPECIFICATION forming part of Letters Patent No. 422,468, dated March 4, 1890.

Application filed November 23, 1889. Serial No. 331,395. (No model.)

To all whom it may concern:

Be it known that I, MOSES E. TRUE, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Saw-Handles, of which the following is a specification.

My invention relates to improvements in crosscut-saw handles in which the handle is detachably yet firmly secured to the blade when in use; and the object of the improvement is to supply a cheap and durable handle that can be readily attached to the saw-blade or removed therefrom at any time by the unskilled workman and without the aid of special tools. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the handle with a section of a saw-plate secured thereunto, the draw-bolt and the portion of the plate within the handle being shown in dotted lines. Fig. 2 is a cross-sectional view of the handle on a line with the upper rivet, showing the draw-bolt in dotted lines; and Fig. 3 is a top plan view of the hooked securing-bolt in working position with the saw-blade with the handle removed, showing the line of draft of the bolt relatively with the plate.

Similar letters refer to similar parts throughout the several views.

In order that a detachable saw-handle may be of practical utility, it is necessary to have a firm attachment with the blade, that the draft be centrally with the saw in the line of its length for the prevention of all side strain with the consequent splitting of the handle when made of wood; and it is desirous of having the handle of simple construction for ease of attaching and detaching, as well as for lessening the cost of the same, which objects are attained in my device, wherein—

A represents the handle, made of wood; B, the saw-blade, the end of which reaches centrally within the handle at the lower end of the same by means of the longitudinal slot C made therein. This slot is of a length corresponding with the width of the blade at its end, and of a width in correspondence with the thickness of the same, and of sufficient depth to prevent any twisting of the handle relatively with the blade when the saw is being practically used.

To prevent the splitting of the handle by the side wrench thereof, as well as for providing a metallic end abutment for the blade, I insert the cross-rivets D at the bottom of the slot, which rivets pass entirely through the handle and are headed upon the wood at either end of the rivet. These rivets are in the same longitudinal line relatively with the handle and so placed that a rivet will impinge against the end of the blade at the upper and lower edges thereof.

E is a hooked draw and saw-securing bolt, screw-threaded upon its free end and carrying thereupon a correspondingly screw-threaded thumb-nut E′ and the intervening washer *e*. This bolt E is flattened upon the hook side for a portion of its length, as at *e′*, the part remote from the hook being of deeper cut, so that the bolt stands upon an angle with reference to the blade, as is shown in Fig. 3, for a purpose that will now be explained.

In practical use the wooden handle is by means of the hooked bolt (the hook entering a hole in the blade) and thumb-nut drawn tightly against the rivets at the bottom of the slot, and must at all times be held thereagainst.

As there is some considerable strain upon this connecting mechanism by the forward and backward thrust of the saw, the slot should be in the longitudinal center of the handle and of some considerable depth. On account of this central saw-connection it is necessary to have the inner end of the hooked bolt at one side of the slot, and were not the diagonal part *e′* used the bolt would continue at the side of the slot the entire distance through the handle, (instead of reaching the center, as herein shown,) thereby giving a side pull, with a liability to bend the bolt and split the handle unless the same were greatly enlarged at this point, as well as causing the wear to come on one side of the slot-wall, so that in time the handle would by the unequal pull become disengaged from the blade, thereby rendering it useless.

Preferably, for practical work the blade

should pass within the slot at least one-half the distance of the diameter of the ordinary handle, (say of one and one-fourth inch,) and that the side wall of the slot be made to impinge against the sides of the blade with the relatively central draft hereinbefore mentioned.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described wooden saw-handle having the deep longitudinal slot in its lower end, the entire sides of the walls of which are made to impinge against the saw placed therein, the cross-rivets passing through the handle at the bottom of the slot and closely headed at either end upon the peripheral part of the handle, and the hooked draw-bolt having the diagonal tang provided with the screw-threaded end and carrying thereupon the tightening-nut, all arranged and operating substantially as herein set forth.

MOSES E. TRUE.

Witnesses:
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